IN THE CLAIMS

- 1-21. (Canceled)
- 22. (Currently amended) A method of inducing a T-cell response to a tumor which overexpresses mesothelin relative to normal tissue from which it is derived, said method comprising:

administering to a patient who has said tumor or who has had said tumor removed, a vaccine composition comprising a polynucleotide encoding a polypeptide comprising an MHC Class I-binding epitope of mesothelin, wherein the epitope binds to an allelic form of MHC class I which is expressed by the patient, whereby a T-cell response to mesothelin is induced, wherein the vaccine composition does not comprise whole tumor cells.

- 23. (Original) The method of claim 22 wherein the tumor is selected from the group consisting of ovarian cancer, pancreatic cancer, mesothelioma, and squamous cell carcinoma.
- 24. (Original) The method of claim 22 wherein the tumor is a pancreatic cancer.
- 25. (Withdrawn) The method of claim 22 wherein the tumor is an ovarian cancer.
- 26. (Currently amended) The method of claim 22 wherein the epitope is selected from the group consisting of: SLLFLLFSL (SEQ ID NO: 1); VLPLTVAEV (SEQ ID NO: 2); ELAVALAQK (SEQ ID NO: 3); ALQGGGPPY (SEQ ID NO: 4); FYPGYLCSL (SEQ ID NO: 5); and LYPKARLAF (SEQ ID NO: 6).
- 27. (Original) The method of claim 22 wherein the polypeptide is mature mesothelin.
- 28. (Original) The method of claim 22 wherein the polypeptide is primary translation product of mesothelin.
- 29. (Currently amended) The method of claim 22 wherein the vaccine <u>composition</u> comprises one or more polynucleotides encoding a mixture of said polypeptides.
- 30. (Original) The method of claim 29 wherein said polypeptides bind to a plurality of allelic forms of MHC Class I molecules.
- 31. (Original) The method of claim 29 wherein said polypeptides bind to a single allelic form of MHC Class I molecules.

- 32. (Original) The method of claim 22 wherein the polypeptide is selected as being an MHC class I-binding epitope using an algorithm.
- 33. (Original) The method of claim 22 wherein the polypeptide is selected as being an MHC class I-binding epitope using two algorithms.
- 34. (Original) The method of claim 22 wherein the T-cell response is induction of specific CD8⁺ T-cells.
- 35. (Currently amended) The method of claim 22 wherein the vaccine <u>composition</u> is acellular.
- 36. (Currently amended) The method of claim 22 wherein the vaccine composition comprises a bacterium selected from the group consisting of: Shigella flexneri, E. coli, Listeria monocytogenes, Yersinia enterocolitica, Salmonella typhimurium, Salmonella typhi, and mycobacterium.
- 37. (Currently amended) The method of claim 22 wherein the vaccine <u>composition</u> is administered in sufficient amount to induce tumor regression.
- 38. (Currently amended) The method of claim 22 wherein the vaccine <u>composition</u> is administered in sufficient amount to keep the patient tumor-free after removal of the tumor.
- 39-110. (Cancelled)
- 111. (Original) The method of claim 22, wherein the polypeptide is mesothelin.
- 112. (Cancelled)
- 113. (New) The method of claim 22 wherein the composition comprises a *Listeria* monocytogenes bacterium.
- 114. (New) The method of claim 22 wherein the polypeptide comprises a plurality of said epitopes.
- 115. (New) The method of claim 22 wherein the polypeptide comprises epitopes SLLFLLFSL (SEQ ID NO: 1); VLPLTVAEV (SEQ ID NO: 2); ELAVALAQK (SEQ ID NO: 3); ALQGGGPPY (SEQ ID NO: 4); FYPGYLCSL (SEQ ID NO: 5); and LYPKARLAF (SEQ ID NO: 6).